

Product datasheet for **RC239744**

PER3 (NM_001289864) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PER3 (NM_001289864) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	PER3
Synonyms:	FASPS3; GIG13
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



[View online »](#)

ORF Nucleotide
Sequence:

>RC239744 representing NM_001289864
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGCATCGCC**

ATGGTTGCCATACACAAAAAGTTTTGAAGTATGCAGGGCATCCTCCCTTGAACATTCTCCATTTCGAT
TTTGTAICTCAAAACGGAGACTACATCATACTGGATTCCAGTTGGTCCAGCTTTGTGAATCCCTGGAGCCG
GAAGATTTCTTTTCATCATTGGTTCGCATAAAGTTCGAACGAGCCCACTAAATGAGGATGTTTTTGCTACC
AAAATTAAGATGAACGATAATGACAAAGACATAACAGAATTACAAGAACAATTTACAACTTCTCT
TACAGCCAGTTCACGTGAGCGTGTCCAGCGGCTACGGGAGCTGGGGAGCAGCGGTCGCAGGAGCAGCT
TGTCAGCATCGCCTCTCCAGTGAAGCCAGTGGGCACCGTGTGGAGGAGACGAAGCGGAGCAGATGACC
TTGCAGCAGGTCTATGCCAGTGTGAACAAAATTAATACTGGGTGAGCAGCTCTACATTGAGTCAATGA
CCAAATCATCATTCAAGCCAGTACGGGGACACGCACAGAACCGAATGGTGGTGGTGAATGAGCAATGG
TGGTGGTGAATGAAGACCTTTACTTCCCTCCACCAAACACTGAAAAACAATAGTGTGTACTGAGCCCC
TGTGAGGATTTGAGGAACGATGAGCACAGCCATCCTATCAACAGATCACTGTATCGACAGTGTATCA
GATACCTGAAGAGCTAACACATTCCAGCTTTGAAAAGAAAGTGTATCTCCTGTACAAATACAACCTCTTC
CTCCTCAGAAGAAGACAACAGAACCACAAGGCAGATGATGTCCAAGCCTTACAAGCTGGTTTGAAATC
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AGGAAGAGCAGAATTATGTTGATAAATCCGAGAAAAGATCCTGTATCACCCCTACAGCTCTCTATCA
GCAAGAAAAGCAGGAGCAAGCTAAATATTCATATTTTCAAGGAGATTCTACTTCCAAGCAGACGCGGTCG
GCCGGCTGCAGGAAGGGAAGCAAGCGGAAGAAGCTGCCGGAGCCGCCAGACAGCAGCAGCTCGAACA
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GCACACCTCGAGCCCGACCTTCCACCTGCCGCCATGGTGCCAGCCAGGCCCTTACCTCGTCCCAGCT
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GGGGCAGCAGCTTCTTGCATATCACCTCAATGTCGTGAGCAATGAGTCCAACCTCTGGACCCACCC
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TTCCAGAAAGCAGCTCACCTTGAGTAAACTTACTTCAGGAAGAGATGCCAGACCCCTCTGAATCTCCA
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AGACAGCTGT

ACCGGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC239744 representing NM_001289864
 Red=Cloning site Green=Tags(s)

MVAIHQKVLKYAGHPPFEHSPIRFCTQNGDYIILDSSWSSFVNPWSRKISFIIGRHKVRTSPLNEDVFAT
 KIKKMNDNDKDI TELQEIQYKLLLPVHVSVSSGYGLGSSGSQEQLVSIASSSEASGHRVEETKAEQMT
 LQQVYASVNIKIKNLGQQLYIESMTKSSFKPVTGTRTEPNGGESANGGGECKTFTSFHQTLKNNSVYTEP
 CEDLRNDEHSPSYQQINCSIDSVIRYLKSYNIPALKRKCISCTNTTSSSSEEDKQNHKADDVQALQAGLQI
 PAIPKSEMPNTNGRSIDTGGGAPQILSTAMLSLGGISQCGYSSTIVHVPPPETARDATLFCWPWTLNMQP
 APLTSEEFKHVGLTAAVLSAHTQKEEQNYVDKFRKILSSPYSSYLQQESRSKAKYSYFQGDSTSKQTRS
 AGCRKGKHKRKKLPEPPDSSSNTGSGPRRGAHQNAQCCPSAASSPHTSSPTFPPAAMVPSQAPYL VPA
 FPLPAATSPGREYAAPGTAPEGLHGLPLSEGLQPYPAPFPYLDTFMTVFLPDPVPCPLLSFLLPCPFL
 GATASSAISPMSSAMPTLDPPPSVTSQRREEEKWEAQSEGHPFITSRSSSPLQLNLLQEEMPRPSESP
 DQMRRTCPQTEYCVTGNGSESSPATTGALSTGSPPRENPSHPTASALSTGSPPMKNPSHPTASALSTG
 SPPMKNPSHPTASTLSMGLPPSRTPSHPTATVLSTGSPSESPSRTGSAASGSSDSSIYLTSSVYSSKIS
 QNGQQSQDVQKETFNPVAEPIWRMIRQTPERILMTYQVPERVKEVVLKEDLEKLESMRQQQPQF SHGQ
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TRTRPLEQKLISEEDLAANDILDYKDDDDKV

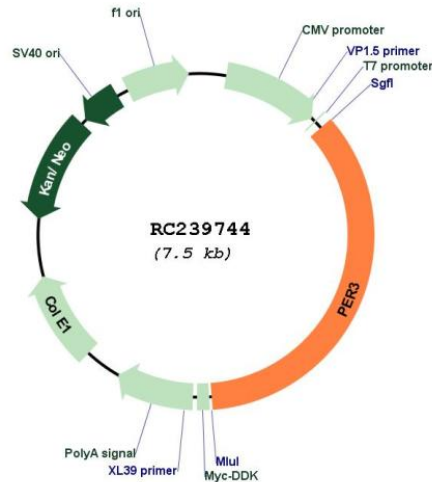
Restriction Sites:

Sgfl-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_001289864

ORF Size: 2670 bp

OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method:

1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.

RefSeq: [NM_001289864.3](#)

RefSeq Size: 6394 bp

RefSeq ORF: 2673 bp

Locus ID: 8863

UniProt ID: [P56645](#)

Cytogenetics: 1p36.23

Protein Families: Druggable Genome, Transcription Factors

Protein Pathways: Circadian rhythm - mammal

MW: 96.8 kDa

Gene Summary: This gene is a member of the Period family of genes and is expressed in a circadian pattern in the suprachiasmatic nucleus, the primary circadian pacemaker in the mammalian brain. Genes in this family encode components of the circadian rhythms of locomotor activity, metabolism, and behavior. This gene is upregulated by CLOCK/ARNTL heterodimers but then represses this upregulation in a feedback loop using PER/CRY heterodimers to interact with CLOCK/ARNTL. Polymorphisms in this gene have been linked to sleep disorders. Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jan 2014]